Nutrition News

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We Need An Integrated Effort To Improve World Nutrition

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Food, shelter, and health are the major concerns of the populations in the developing countries of the world. Any observer whose thoughts, training, or experience have been directed to man's ever-continuing struggle to nourish himself and his family, cannot fail to be impressed with the necessity to mobilize and share technical abilities to assist the less fortunate peoples. To peoples living under conditions where 80 percent or more of the fruits of their toil is spent on food, or where infant mortality due to malnutrition is 50 percent or greater, there is no problem more paramount or more difficult than the conquest of hunger. Malnourished, underfed peoples are subject to the ravages of disease and low productive capacity which result in a vicious cycle of physical, mental, and economic hardships.

Rarely are there simple solutions to the problems of the underfed or malnourished. The complexity of the problems requires an integrated endeavor. Agriculture must not necessarily produce more of the same crops but more diversified crops. Supplementary foods must be produced to improve the diet. Also involved are the health services, education, home sciences, transportation, industry, animal husbandry, and the like. This is a responsibility which must be shared by the research institutions, and perhaps even more important, by the individual.

Many solutions have been advocated. Some are only short term answers. A vigorous economy is the goal for the developing countries. This will come and be more lasting as it emanates from their own resources.

Our great need is to assist these countries by every conceivable means, primarily through our technical ability, to utilize their resources to maximum advantage. Improvement in nutrition and lasting benefits must involve the practical application of education in health, food production, technology, storage, distribution, and preparation. The nutritional status of a population group is dependent upon and the result of such influences as geography, agriculture, economics, education, and social customs and habits. In many countries of the world the nutritional status of the population varies greatly, even within short distances. For example, in Vietnam in two villages less than 15 miles apart the percentage of goiter in the women varied from zero to 50 percent.

The first problem facing the United Nations organizations, World Health Organization (WHO), Food and Agriculture Organization (FAO), United Nations Children's Fund (UNICEF), and the Pan American Health Organization (PAHO), was the vacuum caused by the lack of specific data to define the major nutritional problems and appraise the potentials of the countless areas of the world for improving nutrition. The Interdepartmental Committee on Nutrition for National Defense (ICNND) was organized in 1955 to assist the developing countries to obtain some of these answers. Since January 1956 this Committee has sponsored nutrition programs in 14 countries throughout the world, with three additional countries to be surveyed by July 1961. These programs are part of the U. S. Mutual Assistance Program.

The program of the Committee has been made possible due to the cooperation and response received from over 130 scientists in medicine, nutrition, biochemistry, agriculture, and food technology, from our colleges, universities, and government and private agencies. It encompasses a combination of features. It is a people-to-people program, engendering mutual understanding, confidence and respect. It is a scientific, training, and cooperative program. The initial objectives are to assess the nutritional status of the population groups within a country; to develop recommendations which are consistent with the local resources, customs, and habits; to train participating personnel in the procedures and techniques for nutrition improvement; and to encourage an integrated program of improvement which involves not only the government but the individual.

Dr. Schaefer

American scientists and technologists can help individually in solving our world problems by widening their knowledge of malnutrition in many parts of the world and using this knowledge to inform our public of the urgent needs and requirements involved in the fight for freedom from hunger.

We often encounter the mistaken attitude that we know all the problems of nutritional disease and agricultural production. A glance at the findings of the surveys conducted by WHO, FAO, and the ICNND quickly reveals that there are many serious areas and problems where additional research is vitally needed. For example, for nearly half a century the world has recognized that one of the major causes of goiter is the lack of iodine in the diet. Yet millions still suffer from goiter. In some cases this may be due to causes other than mere iodine deficiency.

Protein malnutrition, one of the most pathetic diseases affecting countless numbers of infants, requires cooperative research and dedicated effort, not just by the physician, the biochemist,

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Glances AT NUTRITION RESEARCH

The man who keeps himself in a good state of nutrition is dealing successfully with his problems in agriculture, his personal habits and the restrictions of his cultural customs and standards. These problems of human kind have no political limits; they are international.

Protein Deficiency Disease—Kwashiorkor is a nutritional disease in which the shortage of good-quality protein is a prime factor. The name has been endorsed by the World Health Organization and the Food and Agriculture Organization of the United Nations. The main treatment is dietary. In severe cases, dilute skim milk is administered in increasing amounts. The disease recurs under conditions of protein deficiency with more serious consequences than at first. The prognosis of cured patients over a life span is not known.

Mayer, Jean, *Kwashiorkor, Postgraduate Medicine 26:98-102, No. 1 (July) 1959.*

Leucine and Pellagra — Pellagra, long associated with dietary dependence on corn, occurs in India where millet is eaten. Both cereals are high in leucine content. The higher incidence of pellagra in millet eaters than in rice eaters is thought to be due to the high leucine content of the millet rather than the deficiency in tryptophan or poor availability of its nicotinic acid. Five gm. of L-leucine daily could divert 3.5 mg. of nicotinic acid daily from the metabolic pool. If the dietary nicotinic acid is already marginal, such a diversion could lower the stores of nicotinic acid enough to precipitate pellagra.

Gopalan, C. and Srikantia, S. G., *Leucine and Pellagra, Lancet 1:954, (April) 1960.*

African Food Habits—Food habits tend to keep protein out of the African diet. Cattle are eaten only when they die of old age or disease. Chickens and eggs are reserved for gifts and game is becoming scarce. Milk is regarded so poorly that certain pastoral tribes in the north of Uganda live on millet and give away milk to their herdsmen. While food taboos are disappearing, they still forbid the consumption of animal protein by the most vulnerable groups of the population — pregnant women, nursing mothers and young children.

Autret, Marcel, *The Battle to Improve Nutrition in the Diet of Africans, News release, Nutrition Division, FAO, July 24, 1960.*

Malnutrition—A Global Problem—The tragedy of malnutrition is that it is preventable if man will apply the scientific knowledge he possesses. This applies to agriculture too. The nutritionist is challenged to correct the difficulties within the existing framework. Trade policy, economics, the impacts of industrialization, urbanization and other factors in national development may appear to be remote from nutrition. Actually, they are often decisive.

Hundley, James M., *Malnutrition—A Global Problem, Fed. Proc. 18:76-81, No. 2, Supp. No. 3, (July) 1959.*

Dr. Arnold E. Schaefer

Dr. Arnold E. Schaefer received both his master's and doctorate degrees from the University of Wisconsin. He is certified by the American Board of Nutrition as Specialist in Human Nutrition. Dr. Schaefer has held positions at South Dakota State College Chemistry Experiment Station, University of Wisconsin, Alabama Polytechnic Intitute, and Squibb Institute for Medical Research. In his present position, he has carried out nutrition surveys in Iran, Pakistan, Korea, The Philippines, Turkey, Libya, Spain, Ethiopia, Peru, Ecuador, Vietnam, and Chile. In addition to editing reports of these surveys, Dr. Schaefer has published over 75 articles.

Congress on Nutrition

The Fifth International Congress on Nutrition was held in Washington, D.C. September 1-7, the first to be held in the United States. Nutrition scientists from all over the world participated. A symposium on "World Food Needs and Food Resources" was one of the main features of the scientific program. Major problems of nutrition throughout the world were discussed during the meeting. Industrial and institutional exhibits supplemented the scientific sessions. Some of the scientists who participated from other countries will be visiting our universities and research centers on lectureship appointments.

TEACHING NUTRITION THE COSMOPOLITAN WAY

By Janina M. Czajkowski, Extension Nutritionist
University of Connecticut

Learning about the foods and nutrition patterns of people from other lands can help families increase their understanding of the importance of nutrition. International foods classes afford numerous opportunities for teaching nutrition in an interesting, dynamic way.

During the past few years, Connecticut families have broadened their horizons by studying the food habits, customs and traditions of their neighbors at home and across the seas. The program is a continuing one. The basis for choosing countries for the foreign food study series has ranged from size of ethnic group (Italian, Swedish, German and French) to world events (Hungary, China and Hawaii). We have involved foreign born and first generation homemakers. Their assistance has proven invaluable in securing authentic information about their food habits and in stimulating interest in the country to be studied.

Information on nutrition, food habits, food preparation, customs and traditions has been assembled in an attractive bulletin for each country. Directions for the preparation of typical dishes, high in food value, have been adapted for American kitchens.

Lay leaders have been trained to teach individuals and groups in their communities. Most of the local leaders conduct one or more classes and informally pass on the information to several of their neighbors and friends. Mass media, such as news releases, radio programs, television broadcasts, and exhibits stimulate interest and supplement the group meetings.

The nutritionist uses methods in conducting her training classes which can easily be adapted for use by the leaders in their own local situations. In this way, the leaders are taught not only what to teach but also "how to teach."

In workshop type classes, nutrition guides and patterns are presented as simple, practical aids for planning family meals. Customs and traditions are studied and discussed. Bulletins, visual aids and discussion guides are made available for the leader's use.

Each country has foods and nutrition practices which could be improved. These we put into action. For example, for the Italian foods project, the nutrition point of emphasis was the calcium story. Visual aids were prepared to illustrate comparative value of foods as sources of calcium. Homemakers were impressed with the importance of doing a better job of planning and preparing meals so they insured an adequate intake of calcium by various members of their family, especially those who said they disliked milk.

The tenacity with which ethnic groups cling to their traditional diets is well known. And changes that are made may throw diets out of balance. In planning what to teach, we take into consideration attitudes as well as ways to improve food habits.

Families have been found more willing to make modifications than to make drastic changes. Only changes that significantly improve diets nutritionwise are encouraged. There are no reflections on any ethnic customs.

The group setting helps provide incentive for making decisions and changing unfavorable attitudes. This fits in with the Extension philosophy of "helping people to help themselves."

The nutrition teaching provides a "tonic" to the will power as well as a basis for intelligent procedure. Homemakers learn that nutrition is of worldwide importance. They learn to plan and prepare well balanced meals. Their families learn to enjoy new favorites with a cosmopolitan flavor.

LET TEEN-AGERS PILOT NUTRITION STUDIES

By Geraldine Acker and Lois Mitchell
Cooperative Extension Work, University of Illinois and Rock Island County

Miss Acker *Mrs. Mitchell*

By teen-age demand, a nutrition project on Teen Time Food Fare in Rock Island County, Illinois, has continued for three years. We have found that teen-agers are eager for the facts of good eating, if activities are aimed at their interests and talents.

The project began when a group of community leaders and teen-agers met to consider teen-age eating habits. The two main points of discussion were what the community could do about the problems and what the teen-agers felt could be done.

While the project was developing, and during its execution, adult guidance was kept to a minimum, with details worked out by teen-age leaders.

We first needed to interest key teen-agers in sponsoring a project on nutrition information. Nine girls, active in the 4-H Key Club of Rock Island County, an honorary 4-H Club group, served as a steering committee. They divided the county, a long narrow one, into three geographical areas, each with 15 junior leaders and a man and a woman counselor.

Next came the challenge of interesting other teen-agers. What are some "gimmicks" about food geared to teen-age interests? Teen-agers enjoy the sociability of preparing and eating snacks, so this was featured the first year. Key leaders were emphatic: "Make the program different. Don't preach. Don't take away everything we like. Have a popular boy for the chairman at the very first meeting. The girls will listen better. The boys won't think it's sissy." So, the program was launched with a Pizza Whingding! Efforts to interest young people brought a capacity audience of 150 teen-agers.

And what type of program was planned? It included a 4-H Club boy explaining the project, a talk on good eating habits, a pizza making demonstration, an introduction to an unfamiliar food—artichokes, and a teen-age panel report on eating habits.

Five meetings followed the Pizza Whingding—four in each area and one final one on a countywide basis. This became a Bar-B-Que Ball, an outdoor chicken barbecue.

A handbook was written for the project. Subject matter included information on nutrition, recommendations for

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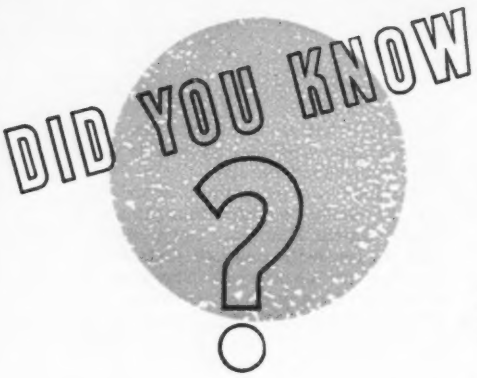

—that in a recent survey milk was the food best liked by Army men; vegetables with butter were better liked than those without; ice cream, plain and sundaes, rated with strawberry shortcake as top popular desserts; cheese and cheese sandwiches rated close to all main dishes?

—that Americans spend more than $1 billion a month on food in the nation's restaurants, with the average family spending $10.97 per week eating out?

—that in 1935-39 the purchasing power of an hour's factory labor was 5 quarts of milk, now it is 8 quarts?

—that a wife's employment outside the home seems to have little effect on the nutritive value of her family's food, though it does affect food costs? On the average, families with employed homemakers spend about $.56 more per person on weekly food supplies than families with similar incomes in which the wife is not employed.

—that over 200,000 American girls married at the age of 17 or under last year and average marrying age in the U. S. is 18?

—that 1960 marks the 150th anniversary of canned foods, with modern tin cans moving to thinner cans and lower freight rates, faster production lines, and new scientific processing methods?

—that the increased consumption of nonfat milk solids in U. S. households has not reduced the fresh fluid milk consumption of families?

THINGS YOU'LL LIKE TO READ

The Teen-Age Years—Roth, Arthur, M.D. Garden City: Doubleday and Company, Inc., 1960. $3.95.

Dr. Roth is a pioneer in the new medical specialty of teen-age medicine, ephebiatrics. His book is a medical guide for young people and their parents covering the whole panoramic subject of health. The author, a pediatrician, writes with a deep understanding of the healthy teen-ager's concern about physical maturing. The book was written for anyone interested in the questions brought to a physician by a teen-ager and the answers the physician gives.

Food Preferences of Men in the U. S. Armed Forces—Peryam, D. R., Polemis, B. W., Kamen, J. M., Eindhoven, J. and Pilgrim, F. J. Dept. of the Army, 1960.

This document is the product of substantial survey and analysis of the food likes and dislikes of men in the armed services. The research was undertaken to gather information on which to base more efficient feeding plans. It will be of interest to all who produce, sell, distribute, buy, prepare, serve, or teach about food. The publication is available from the Quartermaster Food and Container Institute for the Armed Forces, Chicago 9.

LET TEEN-AGERS PILOT NUTRITION STUDIES

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a well-balanced diet, keeping food records, quizzes as a basis for presenting nutrition information, group demonstrations of nutritious snacks. Teen-age leaders and adult counselors were trained at a two-session training school.

Evaluation was a part of the program. Everyone said, "This is fun—this is good! Let's ask for a second year handbook to stress unfamiliar foods, new food experiences and food costs."

"Have loaf—Will linger" was the kickoff for the second year. A loaf type sandwich was featured. Then came the four area meetings, countywide meeting, and final evaluation.

We say so often, "One thing leads to another." And again it did! The final second year countywide meeting featured a film on cheesemaking, a talk by a Swiss cheesemaker, and a party cheese tray for tasting. This stimulated interest in the food customs of other lands and selection of a theme for 1960 —International Food.

Teen Time Food Fare has been keyed to the idea that good food is fun. It has motivated young people to improve food attitudes and snack habits. Teen-agers say its outstanding contribution to them is learning to eat a wider variety of foods. It not only has taught teen-agers, it has taught us.

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and the nutritionist, but with the agriculturist and the food technologist to assist in developing protein supplements which can be cheaply prepared, easily distributed, and well accepted. This requires education in the government, on the farm, in the clinic, in the school, and in the home.

Nutritional anemias still plague large masses of the population, yet today we know little about the specific cause, prophylaxis, prevention, and the relationship and application of anemias to parasitic infestation. What is the most practical solution to this problem? Is it addition of iron to the diet or administration of an anti-helminthic?

Is the high incidence of bladder and kidney stones, which are prevalent in so many countries of the Near and Far East even in young children, due to improper nutrition? There is a need to develop simpler field screening methods for assessing nutritional status.

To perpetuate the free world, it is essential that the fight for freedom from hunger be waged in a vigorous dedicated manner. There are unlimited opportunities for American people from all fields to contribute to health and well-being in the world. This is a challenge we must accept.